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Europe

Flood Of August 2002 In The Rivers Of The Rastern Erzgebirge In Saxony In Germany: Event Analysis

BACKGROUND

In August 2002 the rivers draining from the eastern Erzgebirge into the Elbe were affected by a severe flood event. Twelve people died and the financial damage summed up to several Mio €. This flood was caused by a widespread rainfall event of extraordinary intensity concerning large parts of Germany, Czech Republic, Austria and Slovakia. During the same time several Asian countries also suffered from severe flooding.

OBJECTIVES

The Swiss government decided to support all affected countries with 50 Mio. CHF. One third of this money was reserved for so called prevention projects. 10 Mio. CHF was dedicated for projects in Germany. As prevention projects the following projects were chosen

- Analysis of causes and possible consequences of the floods in the rivers draining the Eastern Erzgebirge ("Event Analysis")
- Establishing flood protection concepts for the same region
- Establish flood hazard index map for whole Saxony
- Re-establish parts of the gauging stations destroyed during the flood of August 2002

ACTIVITIES

All four projects have been carried out in a close collaboration between institutions in Saxony being responsible for flood protection Saxon State Agency for Environment and Geology (LfUG), Dam Authority of Saxony and Swiss experts (Federal Office for Water and Geology, Swiss Federal Research Institute WSL and private enterprises) and were financed by the Swiss Agency for Development and Cooperation. Baseline for all projects was the Swiss flood protection policy developed during the last 20 years as a result of four major flood events affecting Switzerland during this time.

The project event analysis was carried out in close collaboration between LfUG and WSL. It was the objective of this project to pin down causes of the floods of August 2002 in Saxony

and to develop strategies for future improvement of flood protection. For this purpose, hydro meteorological causes have been analysed, damaging processes were identified and the efficiency of flood protection measures have been evaluated as well as flood warning procedures were studied. The study showed the importance of hazard maps as a prerequisite for any flood mitigation strategy. They allow an adapted land use management as well as they can be used in operational planning of interventions during a flood event. The results of the study were presented to local authorities and stakeholders and they have been published in German and as a short management report also in English.

The study and the management report can be downloaded from the following web page: http://www.umwelt.sachsen.de/de/wu/umwelt/lfug/lfug-internet/wasser_5581.html

LESSONS

The most sustainable result of the close collaboration between experts in flood protection from Saxony and Switzerland was a new water regulation established for Saxony. Based on the experience in all four projects and the findings of the event analysis a new law was established. This law is based on the Swiss philosophy for flood protection and is adapted to the specific legal and regional settings of Saxony.

Major reasons for the success of the project were the readiness of the responsible persons from Saxony to improve their procedures and the close collaboration between Swiss and German experts in all phases of the project.



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